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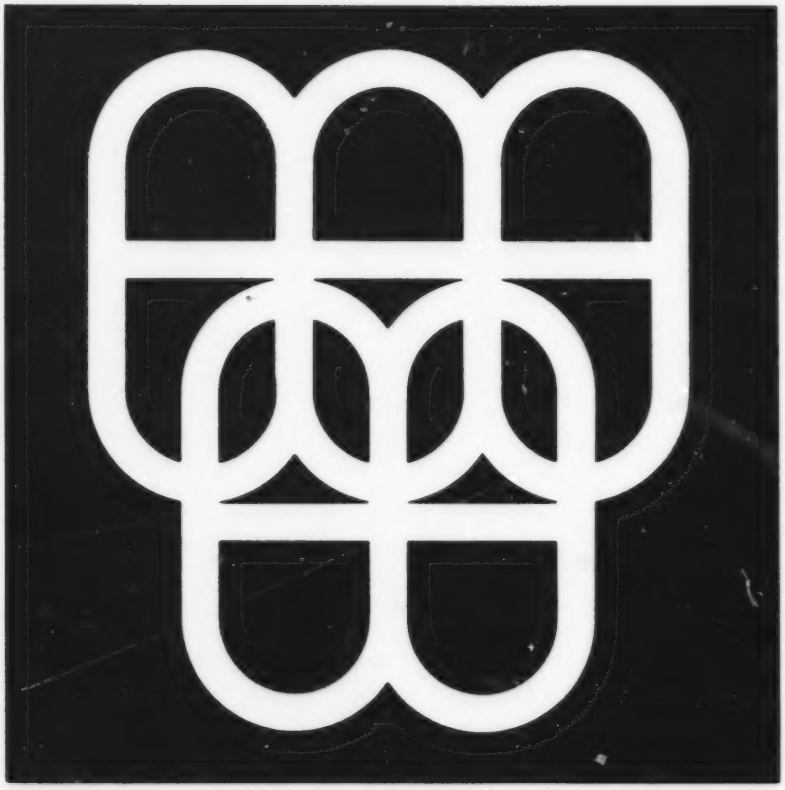
Manitoba Drug Standards and Therapeutics Formulary



Government of Manitoba

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**MANITOBA DRUG STANDARDS
AND THERAPEUTICS COMMITTEE**

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Introduction

The Manitoba Drug Standards and Therapeutics Committee (MDSTC) was appointed to prepare an interchangeable drug formulary in accordance with the requirements of Sections 31, 45 and 46 of The Pharmaceutical Act. The objectives of the MDSTC are to assist the people of Manitoba to obtain prescribed drugs of acceptable quality at a reasonable price, and to assist physicians and pharmacists by the provision of continuing information concerning rational drug prescribing. The Committee was required to develop criteria to establish the therapeutic equivalence of pharmaceutical products, and to develop a Formulary of therapeutically equivalent drugs with due regard to providing the best economies to the patient, compatible with assured quality of the drug product. The responsibility for the selection of the interchangeable drugs listed in the Formulary has thus been that of the Committee. The pricing policy has been the function of the Department of Health of the Province of Manitoba. Recognizing that a list of interchangeable preparations based on chemical equivalence alone may not provide an adequate guide to drug usage, the Committee has assessed the interchangeability of drug products in terms of both quality of manufacture and therapeutic equivalence.

In this appraisal involving inspection, review and testing, a great deal of work has already been carried out and documented by Federal and Provincial drug authorities in Canada. Information provided by the Federal Government Quality Drug Assessment Program (QUAD) and by the Ontario Health Department Parcost Program has been most helpful. Their help, cooperation and practical assistance have been greatly appreciated. A study of the information from these sources and of their procedures of assessment has satisfied the Committee that duplication of their work is unnecessary. The Committee has also studied data obtained more directly and is participating in continuous quality surveillance.

Therapeutic Equivalence

The over-riding principle of the Committee in the selection of interchangeable drugs for inclusion in the Formulary has been to ensure that variation within a group of drugs does not endanger the patient's well-being. The ideal criterion on which to determine therapeutic equivalence of two pharmaceutical products containing the same or similar quantities of an active ingredient is the clinical trial. However, the clinical situation does not readily lend itself to the extensive clinical trials which would be necessary to provide adequate comparison of substantial numbers of similar or identical products. With many drugs notably the pyschoactive agents, the clinical conditions for which they are used are not susceptible to the rigorous assessment of therapy demanded in an adequate clinical trial. In some cases clinical trials for therapeutic equivalence are available. Unfortunately, these are rare, and it has been necessary to use additional criteria. These criteria are basically the well established pharmacopoeial standards, in many cases with additional tests of pharmaceutical excellence, and the data from bioavailability studies where such data are available.

1. Assurance of Quality of Manufacture

This is a comprehensive area which embraces managerial integrity, physical facilities, appropriateness of personnel, consistency of product formulation, comprehensive testing of raw materials and final products,and the many other factors which, when grouped, are commonly referred to as "quality control." These factors include consistency in maintaining the pharmaceutical standards set out in official compendia and by the Department of National Health and Welfare for all drugs approved for use in Canada. These standards include specifications of quality, purity, potency, content uniformity, and for some drug products disintegration time and dissolution rate.

2. Bioavailability

Drug bioavailability studies are designed to determine the rate and extent to which the active ingredients of drug products are absorbed into the body or to the site of action, and are usually based on serial measurements of blood and often urinary levels after administration of the products under consideration. Bioavailability has not yet been sufficiently studied to set standards which can be added to the existing pharmacopoeial specifications. There is no consensus on the methods by which biovailability should be measured. The unresolved questions include the number of subjects each drug should be tested on, whether the effects of a single dose or of continuous drug treatment should be tested, and whether the peak concentration of drug in the blood, the total amount of drug reaching the blood, or the amount excreted in the urine should be the proper criterion. For some drugs assessment of bioavailability may be made difficult or impossible by lack of a suitable chemical or biological test for the drug in the tissue or fluid. For these drugs and for drugs which should not be given to human volunteers for ethical reasons the final test of the bioavailability as well as the efficacy of the drug formulation is the clinical trial.

Many drugs fall into the categories where bioavailability tests have not yet been developed. Even when a suitable test for bioavailability has been developed for a drug, there is no agreement on the acceptable range of bioavailability compared with an acceptable standard preparation of the drug. For example, the actual content of some drugs in their final product form may range according to pharmacopoeial chemical standards from 10% more to 10% less than the labelled amount. The range of bioavailability for these drugs clearly could not reasonably be expected to be closer than the limits of the chemical standard. The limit presently used for reports by the Health Protection Branch, is a mimimum of 80% of the bioavailability determined for an appropriate reference preparation. It should be stressed that this is an arbitr-

ary limit with no relation to the pharmacological, therapeutic or toxic properties of the drug. For critical drugs with a small safety margin between the effective dose and the toxic dose, the tolerance limits of bioavailability should be much closer. For some drugs a wider tolerance of bioavailability is probably of little clinical significance, particularly if the course of the illnesses in which the drug is used can be readily assessed. With most drugs there is a substantial individual variation between patients in the response to the drug and in these cases adjustment of the dose to the personal requirements of the patient is one of the principal duties of the physician. These adjustments can be expected to accomodate moderate variations between the bioavailabilities of different preparations as in the past they have done for the acceptable variations within the pharmacopoeial limits.

It therefore appears that the therapeutic use of many drugs would not be substantially improved by a stringent across-the-board bioavailability requirement for all drug formulations. In addition, practical limitations on the facilities for bioavailability tests preclude the testing of all formulations of all drugs, new and established, within the near future, and it is clearly impossible to test each batch of each product in human subjects. Since apparently minor changes in formulation or in manufacturing practice can result in substantial differences in bioavailability it is often impossible to equate obtainable bioavailability data with the products which pharmaceutical firms put on the market in Canada. In spite of these considerations the number of drugs where bioavailibility has been indentified as a therapeutic problem is very small. For these reasons the Committee has not required bioavailibility data for all types of drugs listed in the Manitoba Drug Standards and Therapeutics Formulary. However, demonstration of adequate bioavailability has been taken as additional evidence that a pharmaceutical firm can prepare an acceptable drug product.

In the absence of acceptable bioavailability and clinical study data on several products, assessment of interchangeability has been based on preparations containing the same or similar amount of active ingredients in the same or similar dosage forms which have been produced in accordance with sound manufacturing principles and found, on adequate testing, to comply with official standards.

Selection of Drugs

The Manitoba Drug Standards and Therapeutics Formulary lists drugs in common use, where more than a single marketed preparation is available in Manitoba and which represent a high proportion of prescription drug sales in Manitoba. The volume of these sales is determined by continuing surveys carried out by the Manitoba Pharmaceutical Association in collaboration with the Manitoba Department of Health.

The Committee is keenly aware that the effectiveness of a program of drug product selection depends very largely on retaining the physician's confidence in the Committee's judgement as to the interchangeability of the drugs. The selection of drugs for inclusion in the Formulary therefore remains restricted to drugs where the patient's safety would not be compromised by minor differences in formulation or bioavailability. The individual products included in the Formulary were selected on the basis of evidence obtained by the Committee that the preparations are formulated and produced in accordance with good manufacturing principles and meet the criteria already outlined.

Each drug product has been individually considered, and the inclusion in the Formulary of a drug preparation made by a pharmaceutical firm should not be taken to imply that the other products of that firm are also interchangeable.

ONLY DRUGS UNDER THE SAME INDIVIDUAL DRUG AND DOSAGE HEADING AS LISTED IN THIS FORMULARY MAY BE SUBSTITUTED.

Manitoba Drug Standards and Therapeutics Formulary

Manitoba

Product Name	Manufacturer	Price In Cents
ACETAMINOPHEN COMPOUND WITH CODEINE — 15 mg — Tablets		Per Tablet
Exdol-15	Frosst	**7.90**
Tylenol with Codeine No. 2	McNeil	**7.22**
Atasol-15	Horner	**6.56**
ACETAMINOPHEN COMPOUND WITH CODEINE — 30 mg — Tablets		Per Tablet
Exdol-30	Frosst	**11.66**
Atasol-30	Horner	**9.67**
Tylenol with Codeine No. 3	McNeil	**7.93**
ACETLYSALICYLIC ACID — 325 mg — Enteric Tablets		Per Tablet
Entrophen	Frosst	**3.59**
Coryphen	Rougier	**3.15**
Ecotrin	Smith, Kline & French	**2.82**
Apo-Asen	Apotex	**2.00**
Novasen	Novopharm	**1.98**
ACETYLSALICYLIC ACID — 650 mg — Enteric Tablets		Per Tablet
Entrophen	Frosst	**6.07**
Coryphen	Rougier	**5.25**
Ecotrin	Smith, Kline & French	**4.48**
Novasen	Novopharm	**3.25**
Apo-Asen	Apotex	**2.50**
ACETYLSALICYLIC ACID COMPOUND WITH CODEINE — 15 mg — Tablets		Per Tablet
282	Frosst	**7.48**
Ancasal 15	Sandoz	**5.42**
ACETYLSALICYLIC ACID COMPOUND WITH CODEINE—30 mg—Tablets		Per Tablet
292	Frosst	**12.70**
Ancasal 30	Sandoz	**7.81**
ALLOPURINOL — 100 mg — Tablets		Per Tablet
Zyloprim	Burroughs Wellcome	**8.50**
Alloprin	ICN Canada	**4.61**
Apo-Allopurinol	Apotex	**4.60**
Novopurol	Novopharm	**4.56**
Roucol	Rougier	**4.50**
Purinol	Horner	**4.32**
ALLOPURINOL — 200 mg — Tablets		Per Tablet
Zyloprim	Burroughs Wellcome	**14.20**
Purinol	Horner	**11.76**
Alloprin	ICN Canada	**11.49**
Apo-Allopurinol	Apotex	**7.75**
Novopurol	Novopharm	**7.74**
ALLOPURINOL — 300 mg — Tablets		Per Tablet
Zyloprim	Burroughs Wellcome	**23.00**
Alloprin	ICN Canada	**13.82**
Roucol	Rougier	**13.00**
Purinol	Horner	**12.06**
Apo-Allopurinol	Apotex	**6.90**
Novopurol	Novopharm	**5.84**

Product Name	Manufacturer	Price in Cents
AMITRIPTYLINE — 10 mg — Tablets		Per Tablet
Elavil	Merck, Sharp & Dohme	**5.76**
Levate	ICN Canada	**2.56**
Apo-Amitriptyline	Apotex	**1.90**
Novotriptyn	Novopharm	**1.86**
AMITRIPTYLINE — 25 mg — Tablets		Per Tablet
Elavil	Merck, Sharp & Dohme	**10.99**
Levate	ICN Canada	**3.72**
Apo-Amitriptyline	Apotex	**1.05**
Novotriptyn	Novopharm	**0.87**
AMITRIPTYLINE — 50 mg — Tablets		Per Tablet
Elavil	Merck, Sharp & Dohme	**20.40**
Levate	ICN Canada	**7.66**
Apo-Amitriptyline	Apotex	**5.50**
Novotriptyn	Novopharm	**4.98**
AMOXICILLIN — 250 mg — Capsules		Per Capsule
Amoxil	Ayerst	**26.88**
Novamoxin	Novopharm	**17.95**
Polymox	Bristol	**12.41**
Apo-Amoxi	Apotex	**9.90**
AMOXICILLIN — 500 mg — Capsules		Per Capsule
Amoxil	Ayerst	**52.30**
Apo-Amoxi	Apotex	**34.20**
Novamoxin	Novopharm	**34.20**
Polymox	Bristol	**34.20**
AMOXICILLIN — 125 mg/5 mL — Oral Liquid		Per mL
Amoxil	Ayerst	**5.01**
Polymox	Bristol	**4.72**
Novamoxin	Novopharm	**2.25**
Apo-Amoxi	Apotex	**2.25**
AMOXICILLIN — 250 mg/5 mL — Oral Liquid		Per mL
Amoxil	Ayerst	**7.61**
Polymox	Bristol	**6.72**
Novamoxin	Novopharm	**3.60**
Apo-Amoxi	Apotex	**3.60**
AMPICILLIN — 250 mg — Capsules		Per Capsule
Penbritin	Ayerst	**11.70**
Apo-Ampi	Apotex	**9.40**
Ampicin	Bristol	**8.13**
Novo-Ampicillin	Novopharm	**7.10**
AMPICILLIN — 500 mg — Capsules		Per Capsule
Penbritin	Ayerst	**23.39**
Apo-Ampi	Apotex	**18.90**
Novo-Ampicillin	Novopharm	**17.10**
Ampicin	Bristol	**17.10**
AMPICILLIN — 125 mg/5 mL — Oral Liquid		Per mL
Penbritin	Ayerst	**2.80**
Ampicin	Bristol	**2.45**
Apo-Ampi	Apotex	**2.00**
Novo-Ampicillin	Novopharm	**1.83**
AMPICILLIN — 250 mg/5 mL — Oral Liquid		Per mL
Penbritin	Ayerst	**5.23**
Ampicin	Bristol	**4.56**
Apo-Ampi	Apotex	**3.30**
Novo-Ampicillin	Novopharm	**3.02**

Product Name	Manufacturer	Price In Cents
BECLOMETHASONE DIPROPIONATE — 200 dose — 0.05 mg/dose — Nasal Spray		per 200 dose unit
Vancenase	Schering	**$12.12**
Beconase	Allen & Hanburys	**$ 9.95**
BECLOMETHASONE DIPROPIONATE — 200 dose — 0.05 mg/dose — Inhalation Aerosol		per 200 dose unit
Vanceril	Schering	**$12.12**
Beclovent	Allen & Hanburys	**$ 9.95**
BETAMETHASONE — 17 — VALERATE — 0.05% — Cream		Per Gram
Betnovate-1/2	Glaxo	**11.67**
Celestoderm-V/2	Schering	**10.36**
Betaderm	K-Line	**1.98**
BETAMETHASONE — 17 — VALERATE — 0.10% — Cream		Per Gram
Betnovate	Glaxo	**15.34**
Celestoderm-V	Schering	**13.77**
Betaderm	K-Line	**3.09**
BETAMETHASONE — 17 — VALERATE — 0.05% — Ointment		Per Gram
Betnovate-1/2	Glaxo	**11.67**
Celestoderm-V/2	Schering	**10.36**
Betaderm	K-Line	**1.98**
BETAMETHASONE — 17 — VALERATE — 0.10% — Ointment		Per Gram
Betnovate	Glaxo	**15.34**
Celestoderm-V	Schering	**13.77**
Betaderm	K-Line	**3.09**
CEPHALEXIN — 250 mg — Capsules		Per Capsule
Ceporex 250	Glaxo	**26.30**
Novolexin	Novopharm	**19.84**
CEPHALEXIN — 500 mg — Capsules		Per Capsule
Ceporex 500	Glaxo	**51.80**
Novolexin	Novopharm	**39.06**
CEPHALEXIN — 250 mg — Tablets		Per Tablet
Keflex	Lilly	**34.26**
Novolexin	Novopharm	**19.84**
CEPHALEXIN — 500 mg — Tablets		Per Tablet
Keflex	Lilly	**68.48**
Novolexin	Novopharm	**39.06**
CEPHALEXIN — 125 mg/5 mL — Oral Liquid		Per mL
Keflex 125	Lilly	**4.16**
Ceporex Granules 125	Glaxo	**3.40**
Novolexin	Novopharm	**2.60**
CEPHALEXIN — 250 mg/5 mL — Oral Liquid		Per mL
Keflex 250	Lilly	**8.15**
Ceporex Granules 250	Glaxo	**6.50**
Novolexin	Novopharm	**5.20**
CHLORAL HYDRATE — 500 mg — Capsules		Per Capsule
Noctec	Squibb	**8.56**
Novochlorhydrate	Novopharm	**3.05**
CHLORDIAZEPOXIDE — 5 mg — Capsules		Per Capsule
Librium	Hoffmann-La Roche	**6.15**
Solium	Horner	**4.54**
Novopoxide	Novopharm	**2.40**
Apo-Chlordiazepoxide	Apotex	**2.40**

Product Name	Manufacturer	Price in Cents
CHLORDIAZEPOXIDE — 10 mg — Capsules		Per Capsule
Librium	Hoffmann-La Roche	8.15
Solium	Horner	6.74
Apo-Chlordiazepoxide	Apotex	3.15
Novopoxide	Novopharm	3.12
CHLORDIAZEPOXIDE — 25 mg — Capsules		Per Capsule
Librium	Hoffmann-La Roche	12.60
Solium	Horner	9.44
Apo-Chlordiazepoxide	Apotex	4.65
Novopoxide	Novopharm	4.62
CHLORPROMAZINE — 25 mg — Tablets		Per Tablet
Largactil	Rhône-Poulenc	4.00
Novochlorpromazine	Novopharm	2.46
CHLORPROMAZINE — 50 mg — Tablets		Per Tablet
Largactil	Rhône-Poulenc	5.81
Novochlorpromazine	Novopharm	3.12
CHLORPROMAZINE — 100 mg — Tablets		Per Tablet
Largactil	Rhône-Poulenc	11.10
Novochlorpromazine	Novopharm	4.80
CHLORPROPAMIDE — 100 mg — Tablets		Per Tablet
Diabinese	Pfizer	6.27
Apo-Chlorpropamide	Apotex	4.25
CHLORPROPAMIDE — 250 mg — Tablets		Per Tablet
Diabinese	Pfizer	12.50
Stabinol	Horner	4.76
Novopropamide	Novopharm	3.85
Chloronase	Hoechst	3.20
Apo-Chlorpropamide	Apotex	1.80
CHLORTHALIDONE — 50 mg — Tablets		Per Tablet
Hygroton	Geigy	9.68
Uridon	ICN Canada	6.33
Apo-Chlorthalidone	Apotex	4.55
Novothalidone	Novopharm	2.64
CHLORTHALIDONE — 100 mg — Tablets		Per Tablet
Hygroton	Geigy	13.02
Uridon	ICN Canada	9.05
Apo-Chlorthalidone	Apotex	8.05
Novothalidone	Novopharm	7.98
CIMETIDINE — 200 mg — Tablets		Per Tablet
Tagamet	Smith, Kline & French	27.79
Peptol	Horner	16.80
Apo-Cimetidine	Apotex	9.40
Novocimetidine	Novopharm	9.36
CIMETIDINE — 300 mg — Tablets		Per Tablet
Tagamet	Smith, Kline & French	31.02
Peptol	Horner	18.00
Apo-Cimetidine	Apotex	12.60
Novocimetidine	Novopharm	9.60
CIMETIDINE — 400 mg — Tablets		Per Tablet
Tagamet	Smith, Kline & French	43.43
Peptol	Horner	20.60
Novocimetidine	Novopharm	16.80
Apo-Cimetidine	Apotex	16.75

Product Name	Manufacturer	Price In Cents
CIMETIDINE — 600 mg — Tablets		Per Tablet
Tagamet	Smith, Kline & French	**58.93**
Peptol	Horner	**36.00**
Novocimetidine	Novopharm	**24.00**
Apo-Cimetidine	Apotex	**23.90**
CLOFIBRATE — 500 mg — Capsules		Per Capsule
Atromid-S	Ayerst	**11.75**
Novofibrate	Novopharm	**9.24**
Claripex	ICN Canada	**8.33**
CLOXACILLIN — 250 mg — Capsules		Per Capsule
Orbenin	Ayerst	**16.88**
Tegopen	Bristol	**11.50**
Apo-Cloxi	Apotex	**11.25**
Novocloxin	Novopharm	**9.29**
CLOXACILLIN — 500 mg — Capsules		Per Capsule
Orbenin	Ayerst	**29.86**
Apo-Cloxi	Apotex	**22.60**
Tegopen	Bristol	**22.43**
Novocloxin	Novopharm	**20.05**
CLOXACILLIN — 125 mg/5 mL — Oral Liquid		Per mL
Orbenin	Ayerst	**4.37**
Tegopen	Bristol	**3.11**
Novocloxin	Novopharm	**2.50**
DIAZEPAM — 2 mg — Tablets		Per Tablet
Valium	Hoffmann-La Roche	**6.45**
Vivol	Horner	**4.08**
E-Pam	ICN Canada	**2.11**
Novodipam	Novopharm	**1.65**
Serenack	Nordic	**1.38**
Apo-Diazepam	Apotex	**0.31**
DIAZEPAM — 5 mg — Tablets		Per Tablet
Valium	Hoffmann-La Roche	**9.05**
Vivol	Horner	**5.64**
E-Pam	ICN Canada	**2.50**
Serenack	Nordic	**1.84**
Apo-Diazepam	Apotex	**1.75**
Novodipam	Novopharm	**0.35**
DIAZEPAM — 10 mg — Tablets		Per Tablet
Valium	Hoffmann-La Roche	**14.60**
Vivol	Horner	**9.25**
E-Pam	ICN Canada	**3.50**
Serenack	Nordic	**2.29**
Apo-Diazepam	Apotex	**2.25**
Novodipam	Novopharm	**0.47**
ERYTHROMYCIN BASE — 250 mg — Tablets		Per Tablet
E-Mycin	Upjohn	**11.50**
Erythromid	Abbott	**9.35**
*NOTE: Eryc - Erythromycin base capsules of Parke-Davis are not interchangeable with the above.		
ERYTHROMYCIN ESTOLATE — 250 mg — Capsules		Per Capsule
Ilosone	Lilly	**29.91**
Novorythro Estolate	Novopharm	**13.80**
ERYTHROMYCIN ESTOLATE — 125 mg/5 mL — Oral Liquid		Per mL
Ilosone	Lilly	**5.42**
Novorythro Estolate	Novopharm	**1.95**
ERYTHROMYCIN ESTOLATE — 250 mg/5 mL — Oral Liquid		Per mL
Ilosone	Lilly	**9.85**
Novorythro Estolate	Novopharm	**3.60**

Product Name	Manufacturer	Price in Cents
FLURAZEPAM HCl — 15 mg — Capsules		Per Capsule
Dalmane	Hoffmann-La Roche	**9.90**
Som-Pam	ICN Canada	**7.77**
Novoflupam	Novopharm	**6.54**
Apo-Flurazepam	Apotex	**6.45**
FLURAZEPAM HCl — 30 mg — Capsules		Per Capsule
Dalmane	Hoffmann-La Roche	**11.60**
Som-Pam	ICN Canada	**9.99**
Novoflupam	Novopharm	**7.15**
Apo-Flurazepam	Apotex	**6.75**
FUROSEMIDE — 20 mg — Tablets		Per Tablet
Lasix	Hoechst	**4.41**
Furoside	ICN Canada	**4.00**
Apo-Furosemide	Apotex	**3.50**
Novosemide	Novopharm	**1.42**
FUROSEMIDE — 40 mg — Tablets		Per Tablet
Uritol	Horner	**9.28**
Lasix	Hoechst	**6.80**
Furoside	ICN Canada	**6.39**
Novosemide	Novopharm	**3.35**
Apo-Furosemide	Apotex	**1.03**
GLYBURIDE — 5 mg — Tablets		Per Tablet
Diabeta	Hoechst	**9.91**
Euglucon	USV Canada	**9.47**
HYDROCHLOROTHIAZIDE — 25 mg — Tablets		Per Tablet
HydroDIURIL	Merck, Sharp & Dohme	**5.82**
Esidrix	Ciba	**5.10**
Apo-Hydro	Apotex	**1.85**
Urozide	ICN Canada	**1.84**
Novohydrazide	Novopharm	**1.80**
HYDROCHLOROTHIAZIDE — 50 mg — Tablets		Per Tablet
HydroDIURIL	Merck, Sharp & Dohme	**8.12**
Esidrix	Ciba	**7.24**
Urozide	ICN Canada	**3.33**
Apo-Hydro	Apotex	**2.00**
Novohydrazide	Novopharm	**0.59**
HYDROXYZINE HCl — 10 mg — Capsules		Per Capsule
Atarax	Pfizer	**11.00**
Multipax	USV Canada	**9.33**
HYDROXYZINE HCl — 25 mg — Capsules		Per Capsule
Atarax	Pfizer	**16.52**
Multipax	USV Canada	**13.99**
HYDROXYZINE HCl — 50 mg — Capsules		Per Capsule
Atarax	Pfizer	**20.38**
Multipax	USV Canada	**16.78**
IBUPROFEN — 200 mg — Tablets		Per Tablet
Motrin	Upjohn	**14.15**
Apo-Ibuprofen	Apotex	**5.75**
Ibuprofen	Kenral	**4.20**
IBUPROFEN — 300 mg — Tablets		Per Tablet
Motrin	Upjohn	**17.35**
Apo-Ibuprofen	Apotex	**7.45**
Ibuprofen	Kenral	**5.55**

Product Name	Manufacturer	Price in Cents
IBUPROFEN — 400 mg — Tablets		Per Tablet
Motrin	Upjohn	**22.25**
Apo-Ibuprofen	Apotex	**9.75**
Ibuprofen	Kenral	**7.10**
IBUPROFEN — 600 mg — Tablets		Per Tablet
Motrin	Upjohn	**31.15**
Apo-Ibuprofen	Apotex	**16.80**
Ibuprofen	Kenral	**11.75**
IMIPRAMINE — 10 mg — Tablets		Per Tablet
Tofranil	Geigy	**10.72**
Impril	ICN Canada	**3.33**
Novopramine	Novopharm	**2.52**
Apo-Imipramine	Apotex	**2.40**
IMIPRAMINE — 25 mg — Tablets		Per Tablet
Tofranil	Geigy	**17.05**
Novopramine	Novopharm	**3.78**
Apo-Imipramine	Apotex	**3.65**
Impril	ICN Canada	**3.50**
IMIPRAMINE — 50 mg — Tablets		Per Tablet
Tofranil	Geigy	**31.00**
Impril	ICN Canada	**7.00**
Novopramine	Novopharm	**5.58**
Apo-Imipramine	Apotex	**5.50**
INDOMETHACIN — 25 mg — Capsules		Per Capsule
Indocid	Merck, Sharp & Dohme	**24.82**
Apo-Indomethacin	Apotex	**11.20**
Novomethacin	Novopharm	**9.13**
INDOMETHACIN — 50 mg — Capsules		Per Capsule
Indocid	Merck, Sharp & Dohme	**40.30**
Apo-Indomethacin	Apotex	**18.00**
Novomethacin	Novopharm	**16.75**
ISOSORBIDE DINITRATE — 5 mg — Sublingual Tablets		Per Tablet
Coronex	Ayerst	**4.76**
Isordil	Wyeth	**4.75**
ISOSORBIDE DINITRATE — 10 mg — Tablets		Per Tablet
Isordil	Wyeth	**5.20**
Coronex	Ayerst	**5.19**
Apo-ISDN	Apotex	**4.90**
Novosorbide	Novopharm	**4.80**
ISOSORBIDE DINITRATE — 30 mg — Tablets		Per Tablet
Isordil	Wyeth	**12.20**
Coronex	Ayerst	**12.18**
Apo-ISDN	Apotex	**11.30**
Novosorbide	Novopharm	**11.16**
LEVOTHYROXINE SODIUM — 0.05 mg — Tablets		Per Tablet
Synthroid	Flint	**2.82**
Eltroxin	Glaxo	**2.75**
LEVOTHYROXINE SODIUM — 0.1 mg — Tablets		Per Tablet
Synthroid	Flint	**3.76**
Eltroxin	Glaxo	**2.70**
LEVOTHYROXINE SODIUM — 0.15 mg — Tablets		Per Tablet
Synthroid	Flint	**4.06**
Eltroxin	Glaxo	**3.75**

Product Name	Manufacturer	Price In Cents
LEVOTHYROXINE SODIUM — 0.2 mg — Tablets		Per Tablet
Synthroid	Flint	**4.28**
Eltroxin	Glaxo	**3.90**
LEVOTHYROXINE SODIUM — 0.3 mg — Tablets		Per Tablet
Eltroxin	Glaxo	**6.00**
Synthroid	Flint	**5.89**
METHYLDOPA — 125 mg — Tablets		Per Tablet
Aldomet	Merck, Sharp & Dohme	**8.59**
Apo-Methyldopa	Apotex	**7.20**
Dopamet	ICN Canada	**6.33**
Novomedopa	Novopharm	**6.17**
METHYLDOPA — 250 mg — Tablets		Per Tablet
Aldomet	Merck, Sharp & Dohme	**15.30**
Dopamet	ICN Canada	**14.05**
Novomedopa	Novopharm	**6.35**
Apo-Methyldopa	Apotex	**6.35**
METHYLDOPA — 500 mg — Tablets		Per Tablet
Aldomet	Merck, Sharp & Dohme	**24.54**
Novomedopa	Novopharm	**20.82**
Apo-Methyldopa	Apotex	**19.70**
Dopamet	ICN Canada	**18.65**
METOCLOPRAMIDE HCl — 10 mg — Tablets		Per Tablet
Maxeran	Nordic	**15.99**
Reglan	Robins	**15.84**
METOPROLOL TARTRATE — 50 mg — Tablets		Per Tablet
Betaloc	Astra	**17.75**
Lopresor	Geigy	**17.46**
Apo-Metoprolol	Apotex	**15.85**
METOPROLOL TARTRATE — 100 mg — Tablets		Per Tablet
Lopresor	Geigy	**31.26**
Betaloc	Astra	**30.30**
Apo-Metoprolol	Apotex	**26.05**
METRONIDAZOLE — 250 mg — Oral Tablets		Per Tablet
Flagyl	Rhône-Poulenc	**8.73**
Novonidazole	Novophram	**7.20**
Apo-Metronidazole	Apotex	**7.20**
pms-Metronidazole	Pharmascience	**6.89**
NAPROXEN — 125 mg — Tablets		Per Tablet
Naprosyn	Syntex	**24.62**
Novonaprox	Novopharm	**15.78**
Naxen	Syn Care	**14.29**
Apo-Naproxen	Apotex	**11.00**
NAPROXEN — 250 mg — Tablets		Per Tablet
Naprosyn	Syntex	**43.99**
Novonaprox	Novopharm	**26.20**
Naxen	Syn Care	**23.96**
Apo-Naproxen	Apotex	**21.00**
NAPROXEN — 375 mg — Tablets		Per Tablet
Naprosyn	Syntex	**48.00**
Naxen	Syn Care	**38.33**
Novonaprox	Novopharm	**33.75**
Apo-Naproxen	Apotex	**33.00**

Product Name	Manufacturer	Price in Cents
NAPROXEN — 500 mg — Tablets		Per Tablet
Naprosyn	Syntex	**83.43**
Novonaprox	Novopharm	**58.92**
Naxen	Syn Care	**58.01**
Apo-Naproxen	Apotex	**45.60**
NITROFURANTOIN — 50 mg — Tablets		Per Tablet
Novofuran	Novopharm	**2.64**
Apo-Nitrofurantoin	Apotex	**2.50**
NITROFURANTOIN — 100 mg — Tablets		Per Tablet
Apo-Nitrofurantoin	Apotex	**3.35**
Novofuran	Novopharm	**3.30**
NITROGLYCERIN — 0.3 mg — Sublingual Tablets		Per Tablet
Nitrostat	Parke-Davis	**2.65**
Nitroglycerin	Lilly	**2.52**
NITROGLYCERIN — 0.6 mg — Sublingual Tablets		Per Tablet
Nitrostat	Parke-Davis	**2.65**
Nitroglycerin	Lilly	**2.52**
Nitrostablin	Allen & Hanburys	**2.45**
OXAZEPAM — 10 mg — Tablets		Per Tablet
Oxpam	ICN Canada	**5.33**
Serax	Wyeth	**5.28**
Novoxapam	Novopharm	**2.82**
Apo-Oxazepam	Apotex	**2.75**
OXAZEPAM — 15 mg — Tablets		Per Tablet
Serax	Wyeth	**6.61**
Oxpam	ICN Canada	**6.28**
Novoxapam	Novopharm	**3.30**
Apo-Oxazepam	Apotex	**3.25**
OXAZEPAM — 30 mg — Tablets		Per Tablet
Serax	Wyeth	**9.58**
Oxpam	ICN Canada	**9.16**
Apo-Oxazepam	Apotex	**4.00**
Novoxapam	Novopharm	**3.96**
OXTRIPHYLLINE — 100 mg — Tablets		Per Tablet
Choledyl	Parke-Davis	**7.15**
Rouphylline	Rougier	**6.00**
Apo-Oxtriphylline	Apotex	**4.75**
Novotriphyl	Novopharm	**4.74**
OXTRIPHYLLINE — 200 mg — Tablets		Per Tablet
Choledyl	Parke-Davis	**8.69**
Rouphylline	Rougier	**8.40**
Apo-Oxtriphylline	Apotex	**5.95**
Novotriphyl	Novopharm	**5.64**
OXTRIPHYLLINE — 300 mg — Tablets		Per Tablet
Choledyl	Parke-Davis	**14.31**
Apo-Oxtriphylline	Apotex	**6.55**
Novotriphyl	Novopharm	**6.54**
OXYPHENBUTAZONE — 100 mg — Tablets		Per Tablet
Tandearil	Geigy	**19.74**
Oxybutazone	ICN Canada	**17.76**
PENICILLIN G (Potassium) — 500,000 IU (300 mg) — Tablets		Per Tablet
P-50	Horner	**10.25**
Megacillin 500	Frosst	**8.16**
Novopen-500	Novopharm	**3.50**

Product Name	Manufacturer	Price In Cents
PENICILLIN V (Benzathine) — 500,000 IU (300 mg)/5 mL—Oral Liquid		Per mL
PVF 500	Frosst	**5.91**
Pen Vee	Wyeth	**4.00**
PENICILLIN V (Potassium) — 500,000 IU (300 mg) — Tablets		Per Tablet
Ledercillin VK	Lederle	**16.38**
Nadopen-V	Nadeau	**15.75**
PVF-K 500	Frosst	**15.38**
Pen-Vee K	Wyeth	**11.60**
Novopen-VK-500	Novopharm	**3.90**
PHENYLBUTAZONE — 100 mg — Tablets		Per Tablet
Butazolidin	Geigy	**16.94**
Apo-Phenylbutazone	Apotex	**2.10**
Novobutazone	Novopharm	**1.92**
PREDNISONE — 5 mg — Tablets		Per Tablet
Deltasone	Upjohn	**2.63**
Novoprednisone	Novopharm	**2.25**
Apo-Prednisone	Apotex	**1.20**
Prednisone	Kenral	**1.20**
PROCYCLIDINE HCl — 5 mg — Tablets		Per Tablet
Kemadrin	Burroughs Wellcome	**5.60**
Procyclid	ICN Canada	**4.22**
PROPRANOLOL — 10 mg — Tablets		Per Tablet
Inderal	Ayerst	**8.06**
Panolol	Pharmascience	**5.89**
Apo-Propranolol	Apotex	**3.60**
Novopranol	Novopharm	**2.48**
PROPRANOLOL — 40 mg — Tablets		Per Tablet
Inderal	Ayerst	**14.28**
Panolol	Pharmascience	**10.99**
Novopranol	Novopharm	**6.60**
Apo-Propranolol	Apotex	**4.50**
PROPRANOLOL — 80 mg — Tablets		Per Tablet
Inderal	Ayerst	**20.60**
Panolol	Pharmascience	**17.43**
Novopranol	Novopharm	**11.22**
Apo-Propranolol	Apotex	**10.20**
PROPRANOLOL — 120 mg — Tablets		Per Tablet
Inderal	Ayerst	**27.51**
Panolol	Pharmascience	**24.42**
Apo-Propranolol	Apotex	**16.05**
Novopranol	Novopharm	**15.30**
SALBUTAMOL — 2 mg — Tablets		Per Tablet
Novo-Salmol	Novopharm	**7.50**
Ventolin	Allen & Hanburys	**6.54**
SALBUTAMOL — 4 mg — Tablets		Per Tablet
Novo-Salmol	Novopharm	**12.60**
Ventolin	Allen & Hanburys	**10.94**
SPIRONOLACTONE — 25 mg — Tablets		Per Tablet
Aldactone	Searle	**21.69**
Novospiroton	Novopharm	**17.02**
SPIRONOLACTONE — 100 mg — Tablets		Per Tablet
Aldactone	Searle	**77.48**
Novospiroton	Novopharm	**52.00**

Product Name	Manufacturer	Price In Cents
SPIRONOLACTONE — HYDROCHLOROTHIAZIDE — 25 mg - 25 mg — Tablets		Per Tablet
Aldactazide 25	Searle	**24.16**
Novospirozine	Novopharm	**19.32**
SULFINPYRAZONE — 100 mg — Tablets		Per Tablet
Anturan	Geigy	**16.80**
Novopyrazone	Novopharm	**11.10**
Apo-Sulfinpyrazone	Apotex	**10.70**
Antazone	ICN Canada	**10.66**
Zynol	Horner	**7.65**
SULFINPYRAZONE — 200 mg — Tablets		Per Tablet
Anturan	Geigy	**23.97**
Antazone	ICN Canada	**15.99**
Novopyrazone	Novopharm	**13.50**
Apo-Sulfinpyrazone	Apotex	**11.50**
Zynol	Horner	**11.16**
SULFISOXAZOLE — 500 mg — Tablets		Per Tablet
Gantrisin	Hoffmann-La Roche	**5.20**
Novosoxazole	Novopharm	**3.48**
TETRACYCLINE — 250 mg — Capsules		Per Capsule
Achromycin V	Lederle	**7.00**
Tetracyn	Pfizer	**5.25**
Novotetra	Novopharm	**3.80**
Apo-Tetra	Apotex	**2.40**
THIORIDAZINE — 10 mg — Tablets		Per Tablet
Mellaril	Sandoz	**8.72**
pms-Thioridazine	Pharmascience	**4.44**
Novoridazine	Novopharm	**3.42**
Apo-Thioridazine	Apotex	**3.30**
THIORIDAZINE — 25 mg — Tablets		Per Tablet
Mellaril	Sandoz	**10.88**
pms-Thioridazine	Pharmascience	**5.44**
Novoridazine	Novopharm	**5.34**
Apo-Thioridazine	Apotex	**5.30**
THIORIDAZINE — 50 mg — Tablets		Per Tablet
Mellaril	Sandoz	**14.88**
pms-Thioridazine	Pharmascience	**9.16**
Novoridazine	Novopharm	**8.70**
Apo-Thioridazine	Apotex	**8.60**
THIORIDAZINE — 100 mg — Tablets		Per Tablet
Mellaril	Sandoz	**25.76**
pms-Thioridazine	Pharmascience	**16.99**
Novoridazine	Novopharm	**13.98**
Apo-Thioridazine	Apotex	**13.95**
TRIAMTERENE — HYDROCHLOROTHIAZIDE — 50 mg - 25 mg — Tablets		Per Tablet
Dyazide	Smith, Kline & French	**14.19**
Apo-Triazide	Apotex	**6.99**
Novotriamzide	Novopharm	**6.99**
TRIFLUOPERAZINE — 1 mg — Tablets		Per Tablet
Stelazine	Smith, Kline & French	**10.25**
Solazine	Horner	**4.60**
Terfluzine	ICN Canada	**4.00**
Apo-Trifluoperazine	Apotex	**1.95**
Novoflurazine	Novopharm	**1.92**

Product Name	Manufacturer	Price In Cents
TRIFLUOPERAZINE — 2 mg — Tablets		Per Tablet
Stelazine	Smith, Kline & French	13.44
Solazine	Horner	6.00
Terfluzine	ICN Canada	4.78
Apo-Trifluoperazine	Apotex	2.40
Novoflurazine	Novopharm	2.40
TRIFLUOPERAZINE — 5 mg — Tablets		Per Tablet
Stelazine	Smith, Kline & French	17.79
Solazine	Horner	8.00
Terfluzine	ICN Canada	6.11
Novoflurazine	Novopharm	3.18
Apo-Trifluoperazine	Apotex	3.15
TRIFLUOPERAZINE — 10 mg — Tablets		
Stelazine	Smith, Kline & French	21.36
Solazine	Horner	9.30
Terfluzine	ICN Canada	7.16
Novoflurazine	Novopharm	5.82
Apo-Trifluoperazine	Apotex	5.70
TRIFLUOPERAZINE — 20 mg — Tablets		Per Tablet
Novoflurazine	Novopharm	9.90
Apo-Trifluoperazine	Apotex	8.40
TRIHEXYPHENIDYL HCl — 2 mg — Tablets		Per Tablet
Artane	Lederle	4.44
Apo-Trihex	Apotex	1.90
Aparkane	ICN Canada	1.89
Novohexidyl	Novopharm	1.86
TRIHEXYPHENIDYL HCl — 5 mg — Tablets		Per Tablet
Artane	Lederle	7.50
Aparkane	ICN Canada	2.72
Novohexidyl	Novopharm	2.28
Apo-Trihex	Apotex	2.25
TRIMETHOPRIM — SULFAMETHOXAZOLE — 20 mg - 100 mg — Tablets		Per Tablet
Bactrim	Hoffmann-La Roche	7.95
Septra	Burroughs Wellcome	7.90
Apo-Sulfatrim	Apotex	7.10
TRIMETHOPRIM — SULFAMETHOXAZOLE — 80 mg - 400 mg — Tablets		Per Tablet
Bactrim	Hoffmann-La Roche	23.55
Septra	Burroughs Wellcome	23.35
Apo-Sulfatrim	Apotex	11.30
Novotrimel	Novopharm	9.48
TRIMETHOPRIM — SULFAMETHOXAZOLE — 160 mg - 800 mg — Tablets		Per Tablet
Bactrim DS	Hoffmann-La Roche	42.25
Septra DS	Burroughs Wellcome	42.10
Apo-Sulfatrim	Apotex	18.35
Novotrimel DS	Novopharm	15.18

Legislation

THE PHARMACEUTICAL ACT
FEBRUARY 1, 1982
AS AMENDED AUGUST 12, 1983.

Regulation.

31 For the purpose of carrying out the provisions of this Act according to their intent, the Lieutenant Governor in Council may make such regulations as are ancillary thereto and not inconsistent therewith; and every regulation made under and in accordance with the authority granted by this section has the force of law; and without restricting the generality of the foregoing the Lieutenant Governor in Council may make regulations

(e) to establish a Manitoba Drug Standards and Therapeutics Formulary and setting out such information with respect to pharmaceutical products as he deems advisable.

S.M. 1980-81, c.12, s. 31.

Definition of "interchangeable pharmaceutical product".

45 (1) In this section "interchangeable pharmaceutical product" means a product containing a drug or drugs in the same or similar amounts of the same or similar active ingredients in the same or similar form as another product directed by a prescription and is listed in the Manitoba Drug Standards and Therapeutics Formulary as being interchangeable with that other product directed by the prescription.

Substitution of interchangeable product.

45 (2) Every person who dispenses a prescription for a drug under its brand, chemical or generic name shall, unless otherwise directed by the prescriber in his own handwriting, dispense an interchangeable pharmaceutical product other than the one prescribed, if the interchangeable pharmaceutical product is listed as an interchangeable pharmaceutical product in the Manitoba Drug Standards and Therapeutic Formulary and is lower in cost than the drug prescribed.

Cost.

45 (3) No person shall knowingly supply an interchangeable pharmaceutical product under subsection (2) at a price in excess of the cost of the lowest priced interchangeable pharmaceutical product and the maximum dispensing fee set out in the Manitoba Drug Standards and Therapeutics Formulary.

Price of certain interchangeable products.

45 (4) Where a prescriber has not authorized the dispensing of an interchangeable pharmaceutical product, the person who dispenses the prescription shall not charge a price for the prescribed drug that is greater than the price set out for that drug in Manitoba Drug Standards and Therapeutics Formulary.

Dispensing of drug not in formulary.

45 (5) Notwithstanding subsection (3), every person who dispenses a prescription for a drug under a brand, chemical or generic name, that is not listed in the Manitoba Drug Standards and Therapeutics Formulary, shall, unless otherwise directed by the prescriber in his own handwriting dispense an interchangeable pharmaceutical product other than the one prescribed but which is in the Manitoba Drug Standards and Therapeutic Formulary and is lowest in cost.

No substitution instructions to continue.

45 (6) In the event a drug is prescribed for a person on a continuing basis and a subsequent prescription is issued for that person for that drug and "no substitution" has been written by the prescriber on the original prescription then all subsequent oral authorizations for the continuation of that prescription for that drug for that person shall be dispensed according to the "no substitution" instructions written on the initial prescription.

Prescriber may waive no substitution instructions.

45 (7) Notwithstanding subsections (2), (5) or (6) where the prescriber of a drug states in the initial prescription for a person that there shall be no substitution for that drug for that person, the prescriber may, in issuing any subsequent authorization for the continuation of that prescription for that drug for that person, waive the "no substitution" instructions set out in the initial prescription.

No action or proceeding.

45 (8) No action or other proceeding lies or shall be instituted against a prescriber or licensed pharmacist on the grounds that an interchangeable pharmaceutical product other than the product prescribed was dispensed in accordance with this section.

Exemption from liability.

45 (9) Where a licensed pharmacist dispenses a drug in accordance with subsection (5), no action or other proceeding lies or shall be instituted against the pharmacist or the prescriber, notwithstanding that the drug dispensed is not an interchangeable pharmaceutical product.

Advisory committee.

46 The Lieutenant Governor in Council may establish and appoint persons as members to a committee to advise him on matters relating to the Manitoba Drug Standards and Therapeutics Formulary and to the information set out therein.

S.M. 1980-81, c. 12, s. 46

INTERCHANGEABLE DRUG FORMULARY PRICING

WHEN THE PHARMACIST IS REQUIRED TO DISPENSE AN INTERCHANGEABLE DRUG PRODUCT, HE SHALL DISPENSE AN INTERCHANGEABLE DRUG PRODUCT FROM THOSE LISTED IN THE INTERCHANGEABLE DRUG FORMULARY AND DO SO AT A COST PRICE THAT DOES NOT EXCEED THE LOWEST PRICE FIGURE LISTED IN PRICE COLUMN AND AT A DISPENSING FEE THAT DOES NOT EXCEED THE MAXIMUM DISPENSING FEE.

The dispensing fee for products listed in the interchangeable drug Formulary is that which is usual and customary to a maximum of $5.05.

Product prices quoted in the Manitoba Drug Standards and Therapeutics Formulary indicate the pharmacists' cost from Manitoba wholesalers and distributors or direct from the manufacturer. These were based on normal quantities purchased in Manitoba. The Department of Health gratefully acknowledges the advice of Mr. D. Maksymyk and Mr. D. Crawford of the Manitoba Pharmaceutical Association, Mr. H. Wuerfel of the Manitoba Society of Professional Pharmacists Inc., Mr. A. Chipman of Brathwaites Ltd., Mr. L. Baydak of National-Drug Ltd., and Mr. A. Shipman of United Pharmacists Wholesale, in Winnipeg, without which it would not have been possible to arrive at this pricing pattern.

REPEAT PRESCRIPTIONS

When the prescriber specifies the brand of a Formulary drug and indicates on the original prescription "DO NOT SUBSTITUTE", the pharmacist can continue to provide the specified brand only under certain conditions:

> When the prescriber specifies in his or her own handwriting the number of repeats permitted
>
> or
>
> When the prescriber gives an oral authorization for the continuation of the "DO NOT SUBSTITUTE" instructions set out in the original prescription.

Alternately, the prescriber may orally, or in writing, waive the "DO NOT SUBSTITUTE" instructions set out in the original prescription. In such a case the prescriber's order constitutes a new prescription.

A prescriber cannot arrange with a pharmacist that all his or her prescriptions be dispensed as specified brands automatically. Each order must be marked "DO NOT SUBSTITUTE" in the physician's own handwriting. Unless so marked, failure to dispense an interchangeable Formulary drug at the lowest price contravenes The Manitoba Pharmaceutical Act.

The foregoing legal requirements are derived from the Regulations to The Food and Drugs Act (Canada) and The Manitoba Pharmaceutical Act.